

DEPARTMENT OF TRANSPORTATION**DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



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Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:**Pursell, Gary**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-004074**Date Inspected:** 23-Sep-2008**Project Name:** SAS Superstructure**OSM Arrival Time:** 1400**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 2300**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai China**CWI Name:** Li Yang**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower**Summary of Items Observed:****89M Mock-up**

This QA Inspector was informed by ABF that ZPMC had proceeded to weld number MUB-MA21-G/J-26 without weld number MUB-MA21-G/J-25 being accepted by ABF (ABF had rejected weld 25 yesterday due to cool down rate exceeded approved procedure). ZPMC had also detected a crack in the root pass and had repaired this area also to continue with the trial mock up. ZPMC then agreed that they would remove the fit lug completely and restart this procedure tomorrow 9-24-08.

Tower shop bay 2

This QA inspector randomly observed ZPMC fabrication process in tower shop bay 2 performing the following operations. ZPMC was using automated flame cutting for bevel preparations on multiple components in the front of the tower shop. It was observed that at this same location ZPMC had performed the back gouge procedure for SAW welding on CJP weld joints ESD1-SA376 A/E-4B and ESD1-SA376-A/E-6B. Grinding personnel was noted as cleaning these areas to a bright smooth finish to restart the SAW welding process.

In the rear of bay 2 ZPMC was fitting double diaphragm plates to East skin plate A. The diaphragms fitted were 23M, 33M and 43M. These components were tack welded in place and braced. 2 additional double diaphragms were observed being fit on this skin plate later in the shift which included 47.6M and the 18M locations.

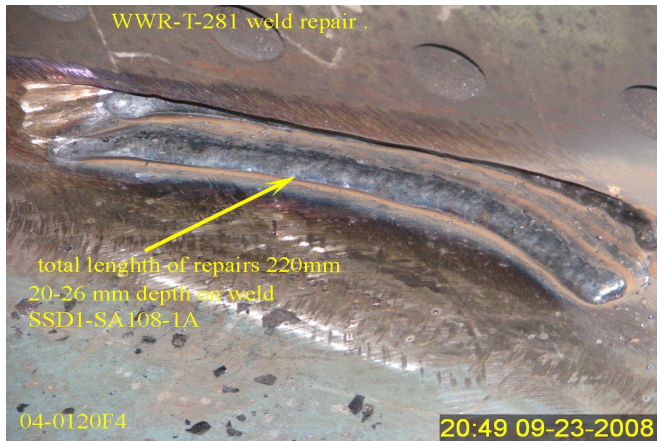
Tower shop bay 1

This QA inspector observed ZPMC performing weld repairs for the following locations and WWR numbers. 1) WWR, T-WR286 for the south tower skin A where the 4 holes in the skin plate are to receive the double diaphragm plates. These areas were distorted during the heat straightening process and the measurements were now out tolerance. ZPMC used the FCAW process to add 7mm of weld metal to the inside face at all 4 locations to machine back to a 5mm depth. 2 welders were noted at this location 1) Yu Yonglai- 048378 and 2) Zhu

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Zhongyun- 057194. The welding position was in the 2F position for fillet welding under WPS-345-FCAW-2G(2F)-Repair. ZPMC's CWI Xu Le Feng was observed as being onsite for this procedure and monitoring the parameters and progress. 2) WWR number T-WR281 for skin E weld number SSD1-SA108-1A. This area under repair was due to ZPMC UT department finding rejectable indications that required removal and repair. The welder for this process was Jiang Zhou-040261 under WPS-345-2G (2F)-Repair. The depth of excavation was approximately 20-26mm with a length 220mm. The FCAW process was being utilized for this location. Also Noted in tower shop bay 1 was the SAW welding SSD1-SA163 for the CJP and PJP weld splice. The CJP splice was under WPS-B-T-2221-B-U3c-S-2 at the following locations and welder ID number, A/D-27A welder 050295, A/D-19A welder 050295, A/D-20A welder 040414 and B/D-4A welder 040414. For the PJP weld splice locations and welder ID numbers are C/D welder 050295, A/D-23 welder 050295, A/D-25 welder 040414 and C/D-5 welder 040414. ZPMC had QC personnel onsite along with CWI Li Yang for the monitoring of parameters and progress.



Summary of Conversations:

As noted above.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Joshua Ishibashi, 1-376-471-0411 , who represents the Office of Structural Materials for your project.

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Inspected By:	Riley, Ken	Quality Assurance Inspector
Reviewed By:	Carreon, Albert	QA Reviewer
